

REMARKS/ARGUMENTS

This Amendment is submitted in response to the Office Action mailed March 9, 2004. At that time claims 1-43 were pending in the application. In the Office Action the Examiner indicated that claims 3, 21, and 40 contain allowable subject matter, but objected to the claims as being dependent upon a rejected base claim. The Examiner rejected claims 1-2, 4-8, 12-20, 22-33, 38-39, and 41-43¹ under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,562,304 to Gest (hereinafter "Gest"). The Examiner also rejected claims 9 and 34 under 35 U.S.C. §103(a) as being unpatentable over Gest in view of U.S. Patent No. 5,845,933 to Walker et al. (hereinafter "Walker"). Claims 10-11 and 35-36 were further rejected under 35 U.S.C. §103(a) as being unpatentable over Gest in view of U.S. Patent No. 6,095,561 to Siddiqui et al. (hereinafter "Siddiqui"). Claim 37 was also rejected under 35 U.S.C. §103(a) as being unpatentable over Gest.

Applicants note that in the Office Action Summary, it was indicated that claims 25-43 were allowed. However, those claims were rejected/objected to by the Examiner in the text of the Office Action itself. Applicants assume that the discrepancy was an oversight and are responding to this Office Action as if the claims were rejected/objected to.

By this Amendment, claim 1 has been amended. Claim 3 has been cancelled. Accordingly, claims 1-2 and 4-43 are presented for reconsideration by the Examiner.

ALLOWABLE SUBJECT MATTER

The Examiner indicated that claims 3, 21, and 40 would be allowable if rewritten in independent form including all of the limitations of the base and intervening claims. *See* Office Action, page 6. Accordingly, claim 1 has been amended to include the limitation recited in claim 3 and claim 3 (as written in dependent form) has been cancelled. Therefore, as newly amended claim 1 is allowable, dependent claims 2 and 4-24, which depend directly or indirectly from claim 1, are also allowable.

¹ Applicants note that the Examiner did not indicate that the rejection applied to claim 5 on the first line of ¶ 2 (Office Action, page 2). However, in the text of the Detailed Action the Examiner discussed the rejection of claim 5. Applicants are responding to this Office Action as if claim 5 were rejected as outlined in the Detailed Action.

REJECTION OF CLAIMS 1-2, 4-8, 12-20, 22-33, 38-39, AND 41-43 UNDER 35 U.S.C. §102(b)

The Examiner rejected claims 1-2, 4-8, 12-20, 22-33, 38-39, and 41-43 under 35 U.S.C. §102(b) as being anticipated by Gest. *See* Office Action, page 2. Applicants respectfully traverse this rejection.

It is well settled that a claim is anticipated under 35 U.S.C. § 102(b) only if “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP §2131, citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

As a result of this paper, claims 1-2, 4-8, 12-20 and 22-24 include the limitation of original claim 3, namely that the housing is axially expandable. Essentially claim 1 has been amended to be originally allowable claim 3 in independent form. Since the Examiner indicated this claim was allowable, all claims that depend therefrom are also allowable since Gest does not disclose the limitation of an axially expandable housing. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claims 25-33, 38-39, and 41-43 include the limitation that the inflator has a membrane positioned within the housing, which defines a combustion chamber. The combustion chamber contains combustible material that can generate inflation fluid upon ignition. Such a limitation is not taught or disclosed by Gest and as such, Gest does not anticipate these claims under §102(b).

Gest discloses an airbag inflator having a filter wall (90) within a housing (12) for cooling inflation gas and filtering out particulate matter prior to the inflation gas exiting the inflator. *See* Gest, col. 5, lines 40-45; col. 8, lines 42-61. The Examiner has argued that the filter wall (90) can be construed as a housing (even though the reference teaches that the filter wall (90) is positioned within the housing (12))² and that the outer surface of the grain (62) is a membrane defining a combustion chamber. *See* Office Action, page 2.

² *See* Gest, col. 5, lines 40-43.

However, the outer surface of the grain (62) is not a membrane. In the context of pyrotechnics, a grain is “a single piece of solid propellant.” *See* McGraw-Hill Dictionary of Scientific & Technical Terms, 5th Edition. The outer surface of the grain (62) is just as it is described – a part (*i.e.*, surface) of the gas generating material itself. It is not a membrane. A membrane acts as a thin pliable sheet of material, much like a skin. According to the claimed invention, the membrane defines a combustion chamber having combustible material positioned within the membrane. The outer surface of the grain (62) of Gest does not define a combustion chamber having combustible material positioned therein because the outer surface of the grain (62) is the combustible material itself. It does not define a chamber. Therefore, the membrane claim limitation cannot read upon Gest’s outer surface of the grain (62).

Furthermore, the Examiner argues that the outer surface of the grain (62) is a membrane that comprises an environmental seal/metalized film. *See* Office Action, page 2. In support of his argument, Examiner points to sections of the Gest specification that discuss a sheet (88) of metal foil. However, this sheet (88) of metal foil is located in the spacer (80) of the device disclosed in Gest. Furthermore, this sheet (88) does not define a combustion chamber for the inflation fluid-generating combustible material. Rather the sheet (88) keeps auto-ignition material (86) in a specified compartment. The auto-ignition material (86) does not produce inflation fluid, but acts as an initiator to ignite the body of gas generating material (60). Therefore, the sheet (88) is not a membrane positioned within the housing, which defines a combustion chamber containing combustible material that can generate inflation fluid upon ignition.³ Since each and every claim limitation is not taught by Gest, Gest cannot anticipate claims 25-33, 38-39, and 41-43 (as well as claims 1-2, 4-8, 12-20 and 22-24) under §102(b). Withdrawal of this rejection is respectfully requested.

³ Gest does disclose a membrane, which is described as a sheet of rupturable pressure controlling material (170). However, this sheet of material (170) is located *outside* the filter wall (90). *See* Gest, Figure 2 and 7, col. 7, lines 34-41. Since the Examiner claims that the housing limitation reads on the filter wall (90) of Gest, there must be a membrane *inside* the filter wall since the claimed invention requires “a membrane positioned *within* the housing” (emphasis added). The membrane limitation of the claimed invention therefore, does not read on the sheet of rupturable pressure controlling material (170) as Gest has been interpreted by the Examiner.

REJECTION OF CLAIMS 9 AND 34 UNDER 35 U.S.C. §103(a)

The Examiner rejected claims 9 and 34 under 35 U.S.C. §103(a) as being unpatentable over Gest in view of Walker. *See* Office Action, page 4. Applicants respectfully traverse this rejection.

According to MPEP §2143.03, to establish a *prima facie* case of obviousness, “all of the claim limitations must be taught or suggested by the prior art.” (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (C.C.P.A. 1974)). “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

The rejection of claim 9 should be withdrawn because it depends directly from now allowable claim 1. Furthermore, since claim 34 depends from claim 25, claim 34 includes the membrane limitation. As discussed above, Gest, as interpreted by the Examiner, does not disclose this limitation. It is unclear why the Examiner has cited Walker since the Examiner fails to discuss Walker in conjunction with this rejection. Although Walker discloses the use of a steel tubular metal basket (col. 9, lines 63-67), this does not read on steel end caps. In any event, the disclosure of Walker does not remedy the problems associated with Examiner’s interpretation of Gest. Therefore, the combination of Gest and Walker does not render claims 9 and 34 *prima facie* obvious under §103(a). Withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 10-11 AND 35-36 UNDER 35 U.S.C. §103(a)

The Examiner rejected claims 10-11 and 35-36 under 35 U.S.C. §103(a) as being unpatentable over Gest in view of Siddiqui. *See* Office Action, page 4. Applicants respectfully traverse this rejection.

As noted above, all claim limitations must be taught to establish *prima facie* obviousness. MPEP §2143.03. The rejection applied to claims 10 and 11 should be withdrawn because these claims depend from now allowable claim 1. Moreover, claims 35 and 36 depend from claim 25, which includes the membrane limitation. As discussed above, Gest, as interpreted by the Examiner, does not disclose this limitation. The Examiner has cited Siddiqui for its disclosure of combustible solid fuel tablets (42, 44). However, the disclosure of Siddiqui does not remedy the

problems associated with Examiner's interpretation of Gest. Therefore, the combination of Gest and Siddiqui does not render claims 10-11 or 35-36 *prima facie* obvious under §103(a).

Withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIM 37 UNDER 35 U.S.C. §103(a)

The Examiner rejected claim 37 under 35 U.S.C. §103(a) as being unpatentable over Gest. *See* Office Action, page 5. The Applicants respectfully traverse this rejection.


In order to establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art references. MPEP §2143.03. The Examiner argues it would have been obvious to have a membrane comprising mylar. However, as discussed above, Gest, as interpreted by the Examiner, does not teach the membrane limitation as recited in the present claims. Therefore, the rejection of claim 37 is misplaced. Withdrawal of this rejection is respectfully requested.

CONCLUSION

Applicants respectfully assert that claims 1-2 and 4-43 are patentably distinct from the cited references, and request that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

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Respectfully submitted,


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